

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars.

1. Rejection of claims 1, 4-6, 8, and 9 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent no. 6,095,509 (*Yonezawa*) in view of U.S. patent no. 6,604,738 (*Haruna*)

Reconsideration of this rejection is respectfully requested on the basis that the rejection fails to establish a *prima facie* case of obviousness with respect to claim 1. The remaining claims depend from claim 1, and are therefore patentable as containing all of the recited elements of claim 1, as well as for their respective recited features.

By way of review, the embodiment of pending claim 1 requires a clamping apparatus having a first block for supporting a second block thereon. A drive member is axially movably inserted into the first block and a pull rod extending beyond a support surface of the first block is connected to the drive member. An inner engaging member is axially movably arranged on the outer periphery of the pull rod. The inner engaging member is also adapted to be radially moveable with respect to the first block. A plurality of outer engaging members is arranged on an outer periphery of the inner engaging member. The outer engaging members are adapted to wedge-engage with the inner engaging member from a leading end side. An output portion of the pull rod is connected to the outer engaging members.

As discussed in detail below, the proposed combination of the *Yonezawa* and *Haruna* patents fails to disclose every feature of pending claim 1. In particular, the proposed combination fails to disclose at least a plurality of outer engaging members arranged on an outer periphery of an inner engaging member, and an output portion of a pull rod connected to the outer engaging members, all as required by pending claim 1.

The shortcomings of each of the *Yonezawa* and *Haruna* patents are independently discussed, and the effect of the individual shortcomings is then

addressed with respect to the deficiencies of the proposed combination of the *Yonezawa* and *Haruna* patents.

Turning to the *Yonezawa* patent, a clamping apparatus having a pull rod 12 is disclosed. An annular collet member 13 is vertically movably arranged around the outer periphery of the pull rod (col. 4, lines 28-29). A peripheral wall of the collet 13 includes a vertical slit 25 to allow contraction and expansion of the collet (col. 4, lines 30-31). An upper half portion of the collet member 13 forms an engaging member 14 (col. 4, lines 31-32).

As apparently acknowledged in the Office action on page 2, the *Yonezawa* patent fails to disclose both an inner engaging member and a plurality of outer engaging members, since only a single engaging member 14 is described. Accordingly, since no outer engaging members are described, the *Yonezawa* patent also fails to disclose a plurality of outer engaging members arranged on an outer periphery of the inner engaging member, and an output portion of a pull rod connected to the outer engaging members, all as required by pending claim 1.

The Office action turns to the *Haruna* patent to cure these deficiencies of the *Yonezawa* patent. On page 2, the Office action asserts that the *Haruna* patent discloses “an inner engaging element 34, 21 that engages an outer engaging element 23.”

The applicants respectfully disagree with this characterization of the disclosure of the *Haruna* patent. The *Haruna* patent discloses a clamping apparatus having a pull rod 13 arranged in a moveable member M (col. 1, lines 47-48). The pull rod 13 is received within an inner space defined by a cylindrical hole 31a of a transmission sleeve 31 (col. 1, lines 63-65; col. 7, lines 1-5).

The transmission sleeve 31 is formed with a plurality of through holes 33 spaced around the periphery of the sleeve (col. 5, lines 58-60). Respective engaging balls/members 34 are supported within the through holes 33 for radial movement between an inward engaging position and an outward disengaging position (col. 5,

lines 61-65). The engaging balls 34 are construed in the Office action as inner engaging members.

The engaging balls 34 are also selectively received in a groove 36 in a plug portion 21 (col. 5, line 66 through col. 6, line 2). The plug portion separates and divides the engaging balls 34 from a shuttle member 23, which the Office action refers to as an outer engaging member (Figs. 1-4).

The Office action improperly considers the plug portion 21 to be an inner engaging member. As discussed in detail in the disclosure of the *Haruna* patent, and as shown in Figs. 1-4 of the *Haruna* patent, the engaging balls 34 are engaging members, and the plug 21 merely provides a recessed area in groove 36 to allow the engaging balls to move to an outward disengaging position. Thus, the plug 21 is not an inner engaging member, especially since the engaging balls 34 are disengaged when they are received within the groove 36 of the plug 21.

Further, even if the shuttle member 23 is considered to be an outer engaging member, the shuttle member 23 is not arranged on an outer periphery of the engaging balls 34, since the shuttle member 23 is clearly shown as being arranged on the outer periphery of the plug member 21, which is positioned between the shuttle member and the engaging balls. Thus, the *Haruna* patent fails to disclose an outer engaging member arranged on an outer periphery of an inner engaging member, as required by pending claim 1.

Since the *Yonezawa* patent also fails to disclose this feature, the proposed combination of the *Yonezawa* and *Haruna* patents must also fail to disclose an outer engaging member arranged on an outer periphery of an inner engaging member, as required by pending claim 1.

Further still, even if the shuttle member 23 of the *Haruna* patent is considered to be an outer engaging member, the *Haruna* patent fails to disclose a plurality of outer engaging members, as required by pending claim 1.

Since the *Yonezawa* patent also fails to disclose this feature, the proposed combination of the *Yonezawa* and *Haruna* patents must also fail to disclose a plurality of outer engaging members arranged on an outer periphery of an inner engaging member, as required by pending claim 1.

Even further still, the shuttle member 23 of the *Haruna* patent is not connected to an output portion of the pull rod 13. Thus, the *Haruna* patent fails to disclose an output portion of a pull rod connected to the outer engaging members, as required by pending claim 1.

Since the *Yonezawa* patent also fails to disclose this feature, the proposed combination of the *Yonezawa* and *Haruna* patents must also fail to disclose an output portion of a pull rod connected to the outer engaging members, as required by pending claim 1.

For at least these reasons, the proposed combination of the *Yonezawa* and *Haruna* patents fails to disclose every feature of pending claim 1, and a *prima facie* case of obviousness cannot be maintained. Accordingly, withdrawal of this rejection is respectfully requested.

Additionally, the Office action has provided no supporting evidence that the proposed combination of the *Yonezawa* and *Haruna* patents would enhance gripping or clamping. Thus, there is no evidence to support the assertion that a skilled artisan would have been motivated to combine the features of the *Yonezawa* and *Haruna* patents in order to enhance the gripping or clamping.

Further still, there is no reasonable expectation that the proposed combination of the *Yonezawa* and *Haruna* patents would be successful. Merely adding the plug 21, engaging balls 34, and the shuttle member 23 of the *Haruna* patent to the clamping apparatus of the *Yonezawa* patent would not be sufficient to provide a clamping apparatus that would successfully clamp a device or block.

Specifically, additional structure, such as the transmission sleeve 31, and closure member 38 of the *Haruna* patent would be necessary. However, there is no

apparent position for these additional features in the structure of the *Yonezawa* patent. In particular, the pull rod 12 of the *Yonezawa* patent would need to be replaced by the closure member 38 of the *Haruna* patent. Thus, the clamping apparatus of the *Yonezawa* patent would cease to function as originally intended, and a skilled artisan would essentially need to replace the entire clamping system of the *Yonezawa* patent with the features of the *Haruna* patent in order to obtain a successful clamping device.

Accordingly, for at least this reason, there is no reasonable expectation that the proposed combination of the *Yonezawa* and *Haruna* patents would be successful, and thus, a *prima facie* case of obviousness cannot be maintained. Accordingly, withdrawal of this rejection is respectfully requested.

As mentioned above, applicants submit that independent claim 1 is patentable and therefore, claims 4-6, 8, and 9, which depend from claim 1, are also considered to be patentable as containing all of the elements of claim 1, as well as for their respective recited features.

2. Rejection of claims 2, 3, and 7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent no. 6,095,509 (*Yonezawa*) in view of U.S. patent no. 6,604,738 (*Haruna*) and further in view of U.S. patent no. 6,024,354 (*Yonezawa*; hereinafter “the ‘354 patent”)

Reconsideration of this rejection is respectfully requested on the basis that the ‘354 patent fails to provide for the deficiencies of the *Yonezawa* and *Haruna* patents with respect to pending claim 1, as discussed above. Since claims 2, 3, and 7 depend from claim 1, they are considered to be patentable as containing all of the features of pending claim 1, as well as for their individually recited features.

Similarly to the *Haruna* patent, the ‘354 patent discloses a plurality of engaging members 13. However, the ‘354 patent also fails to disclose any outer engaging members, and thus, fails to make up for the shortcomings of either the *Yonezawa* or the *Haruna* patents discussed above.

Accordingly, a *prima facie* case of obviousness cannot be maintained with respect to claim 1, from which claims 2, 3, and 7 depend, and withdrawal of this rejection is respectfully requested.

3. Conclusion

In view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicants' attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,

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